SERVICE EQUIPMENT
for
FORD AGENTS

FORD MOTOR COMPANY
DETROIT, MICHIGAN, U. S. A.

Service Equipment
for
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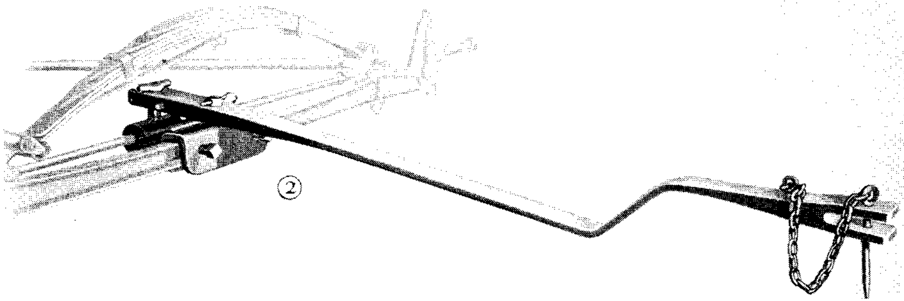

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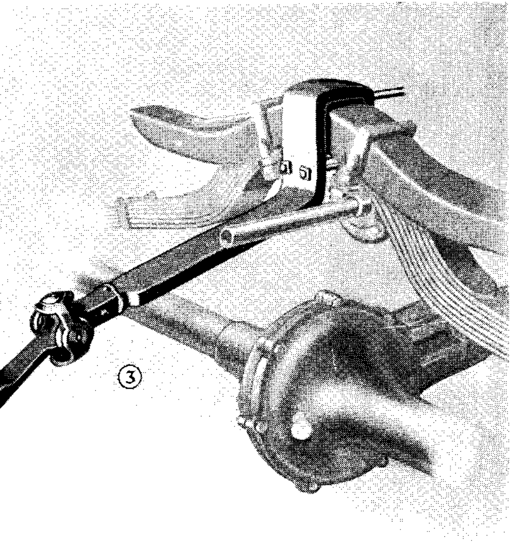

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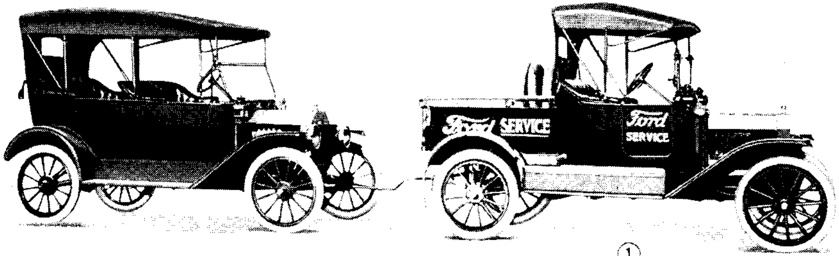
Figure No. 1 shows a service body mounted on the rear of a Ford chassis. The lines of the body conform to those of the chassis, making a strong, well-balanced and attractive service car. This car is shown towing a disabled car by the one-man tow bar. By means of this device a car can be towed without the aid of a driver in the rear car.

Figures Nos. 2 and 3 show in detail the construction of the one-man tow bar and the manner in which each part is attached to the car. The clamps shown in Figure 2 are secured to the front axle and spindle connecting rod by set screws. The bar works on the pivots, thus guiding the car without a driver at the wheel. The part attached to the service car, shown in Figure 3, is permanently clamped around the rear spring and cross member. Ford agents will find the one-man tow bar an efficient help in their service work.



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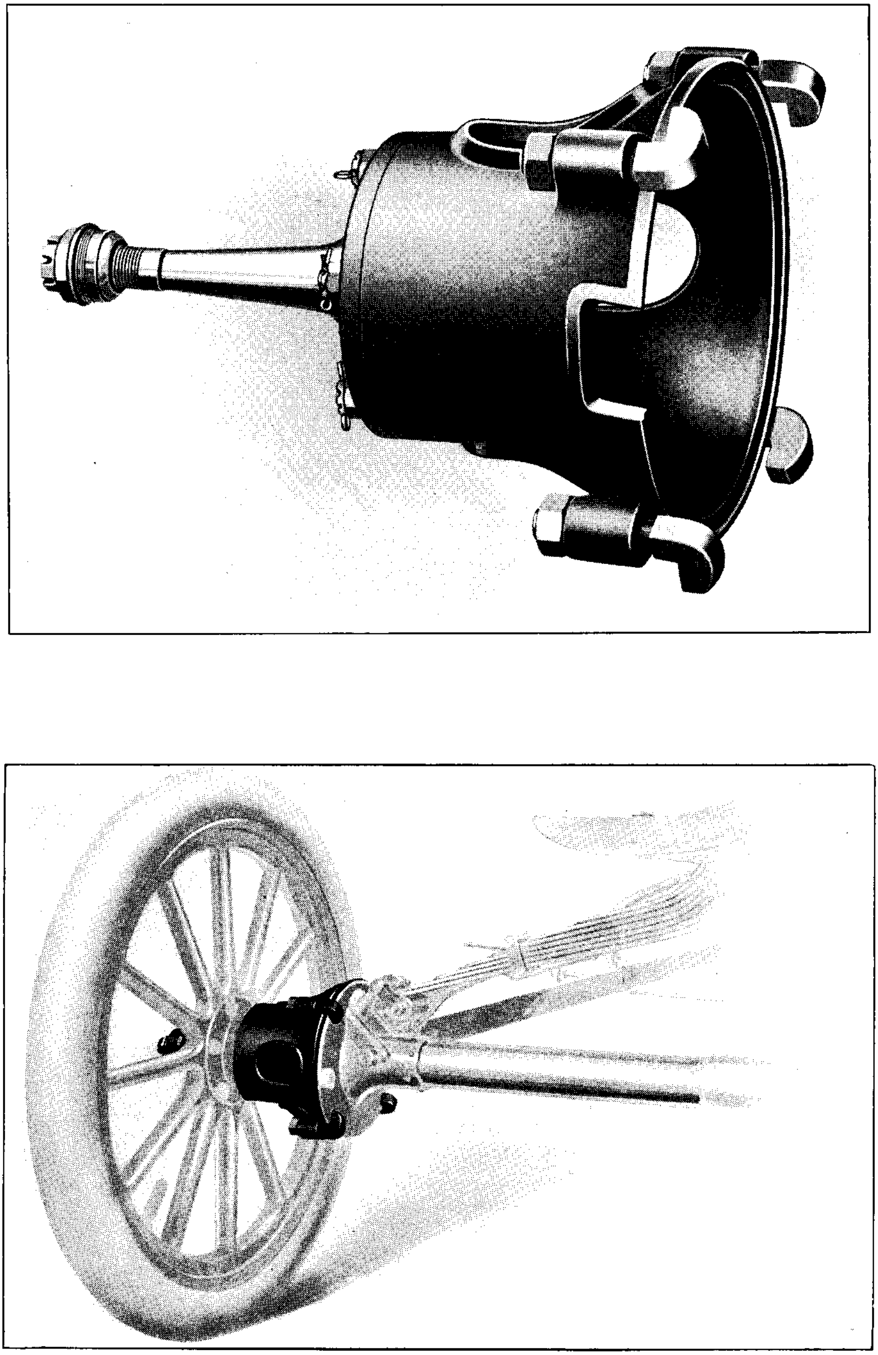
ONE-MAN TOW BAR



EMERGENCY WHEEL CLAMPING DEVICE

Upper picture shows in detail the emergency wheel clamping device. Lower picture shows the equipment with a front wheel clamped to the flange of the rear axle housing

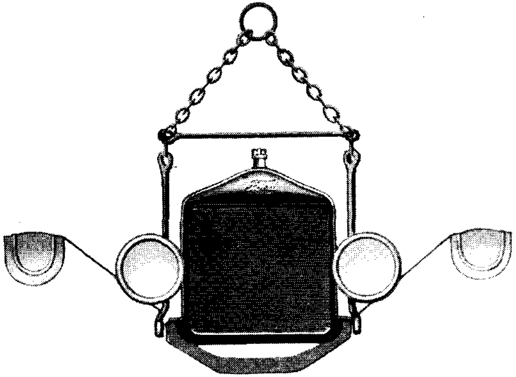


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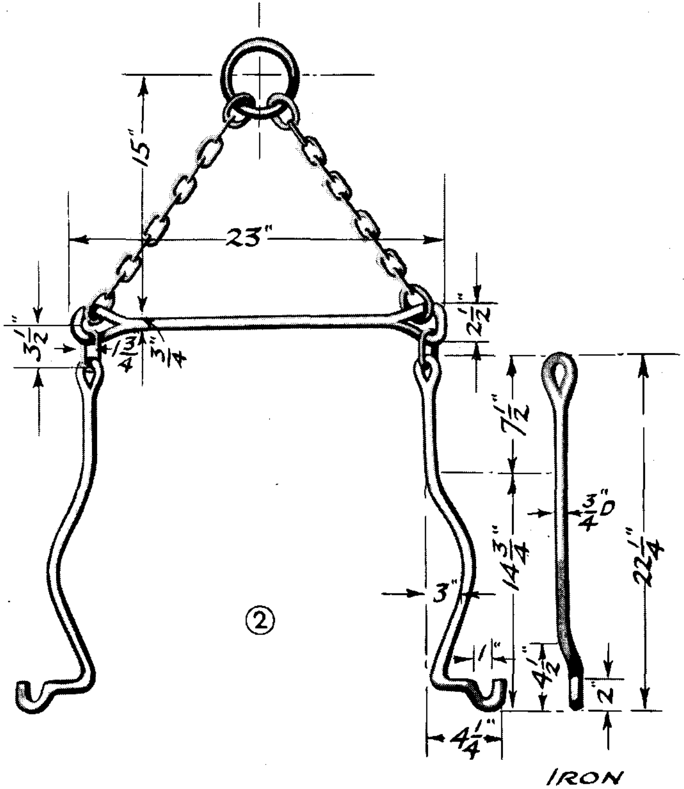
Figure No. 1 shows device in position for raising the front end of a Ford car while removing or repairing front axle or spring. Each hook is placed on the fender iron below the nut on end of the lamp bracket. The ring is placed in the hook on the chain fall and the car easily raised.

Ford agents will be able to have this equipment made by local blacksmiths from the details and specifications shown in Figure No. 2. The front end hook should be part of the equipment of every Ford repair shop.



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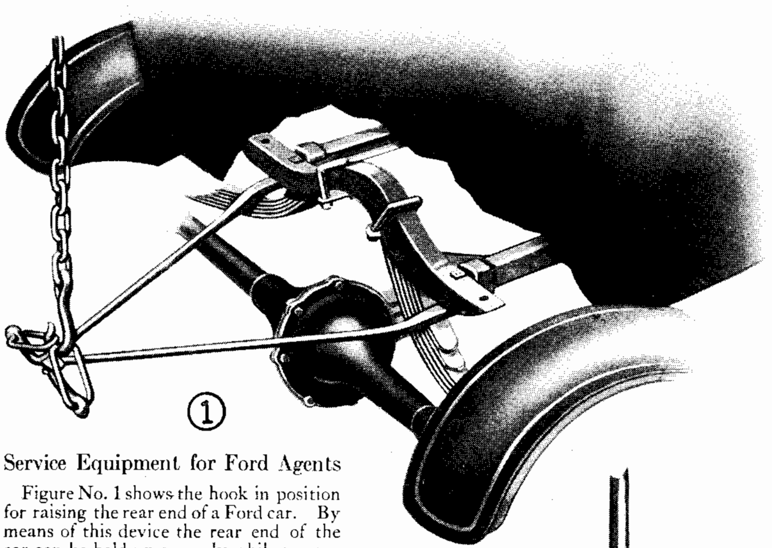
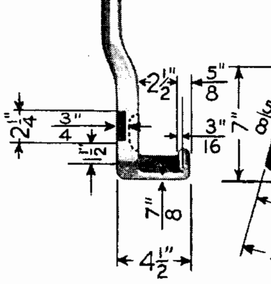
FRONT END HOOK

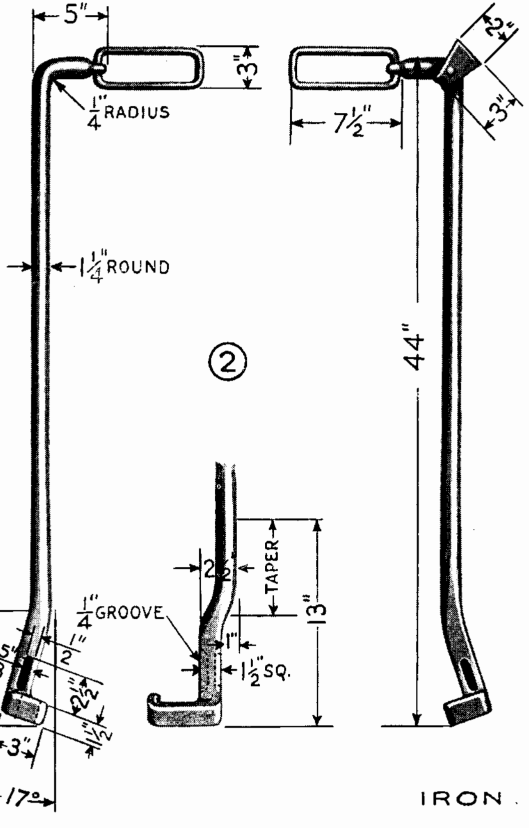


Service Equipment for Ford Agents

Figure No. 1 shows the hook in position for raising the rear end of a Ford car. By means of this device the rear end of the car can be held up securely while removing or repairing the rear axle assembly or spring. In attaching the hook place the clamps on the end of each bar on the frame, then bring the ends of the bars together, one bar resting in the safety clevis on the other bar. The links are then placed in the hook on the chain-fall and the car easily raised.

Figure No. 2 shows in detail with specifications the method of constructing the rear end hook. This equipment can be made by local blacksmiths and Ford agents will find it an efficient help in their repair work.





REAR END HOOK

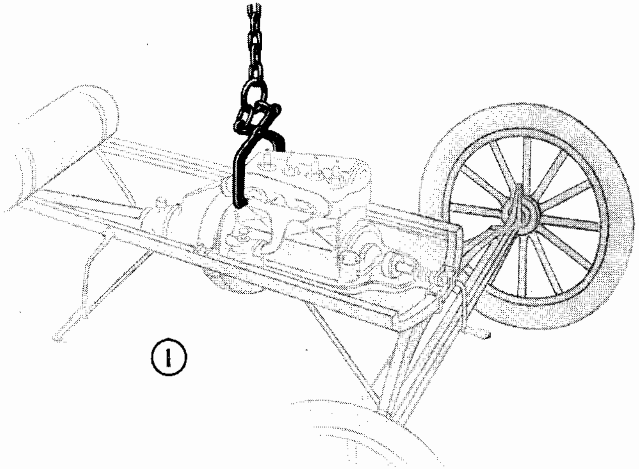
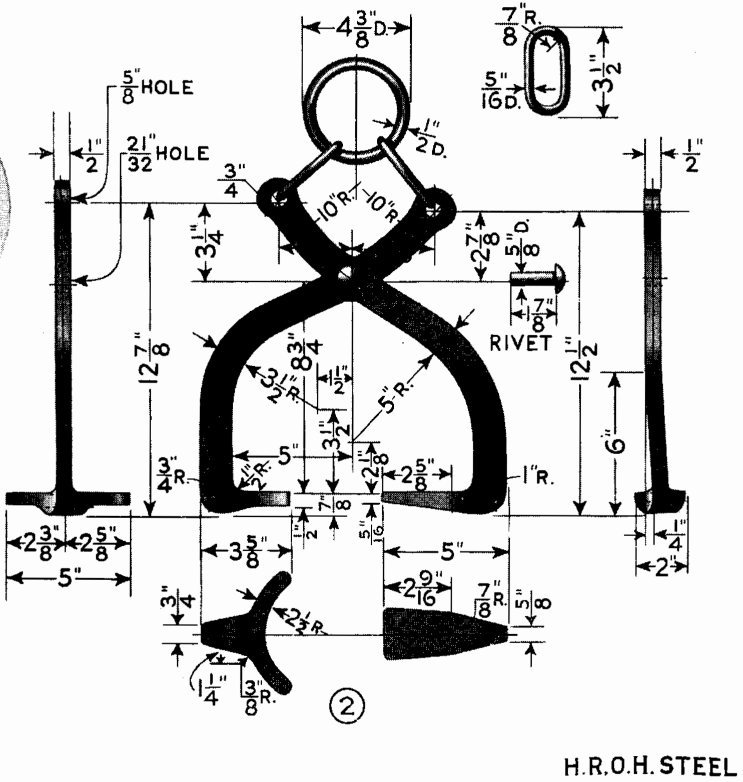


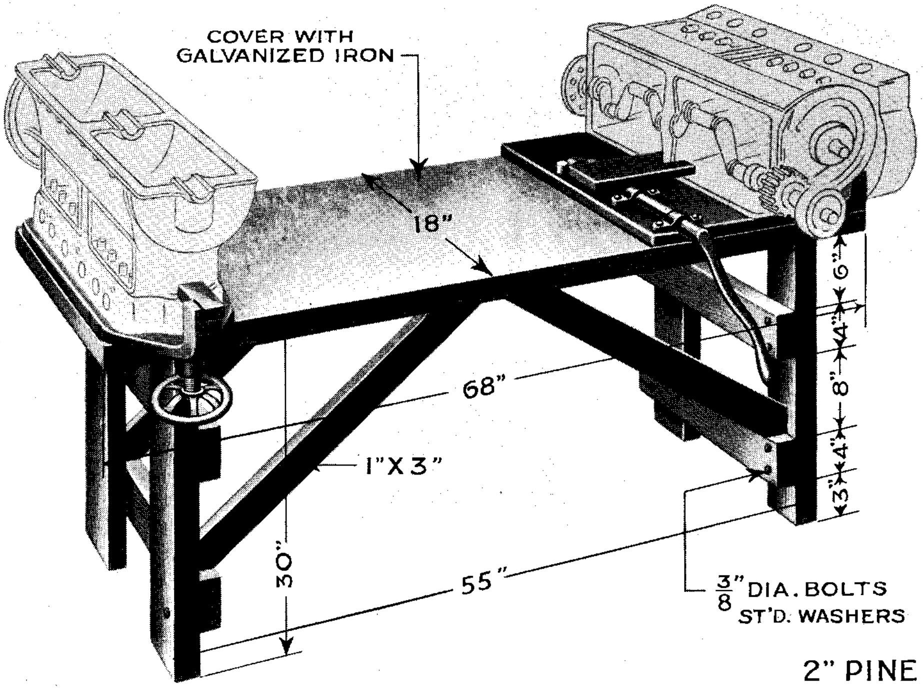
Figure No. 1 shows the hook in position for removing the motor from the car or conveying it to and from the motor trucks. In attaching the hook place the arm with the two prongs around No. 4 cylinder, the other arm falling against the block just above the valve covers. With the hook in this position the motor will be properly balanced. The ring may then be placed in the hook on the chain fall and the motor easily lifted out.

Ford Agents will be able to have the motor hook made by local mechanics from the specifications in Figure No. 2.

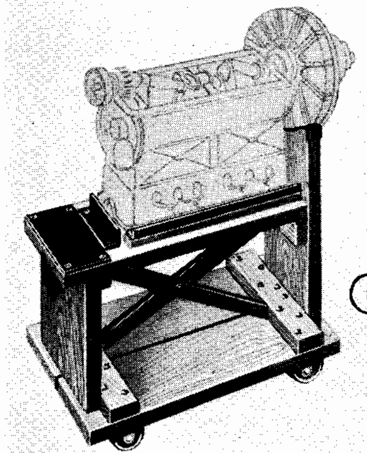


MOTOR HOOK

The accompanying photograph shows the motor bench in detail with specifications so that Ford agents can have it constructed by local mechanics. At the left the clamp plate is shown mounted on the bench holding a cylinder block in position for scraping bearings and fitting crank shaft. At the right is shown the fixture for holding cylinder attached to the bench with cylinder block in position for fitting pistons, assembling transmission to block, installing valves, push rods, cam shaft, time gears, etc. If desired a vise may be installed at the center of the bench. The motor bench with fixtures will be found of great benefit in motor repair work.


COVER WITH GALVANIZED IRON
18"
68"
6"
4"
8"
4"
3"
1"X3"
30"
55"
$\frac{3}{8}$" DIA. BOLTS ST'D. WASHERS
2" PINE

MOTOR BENCH



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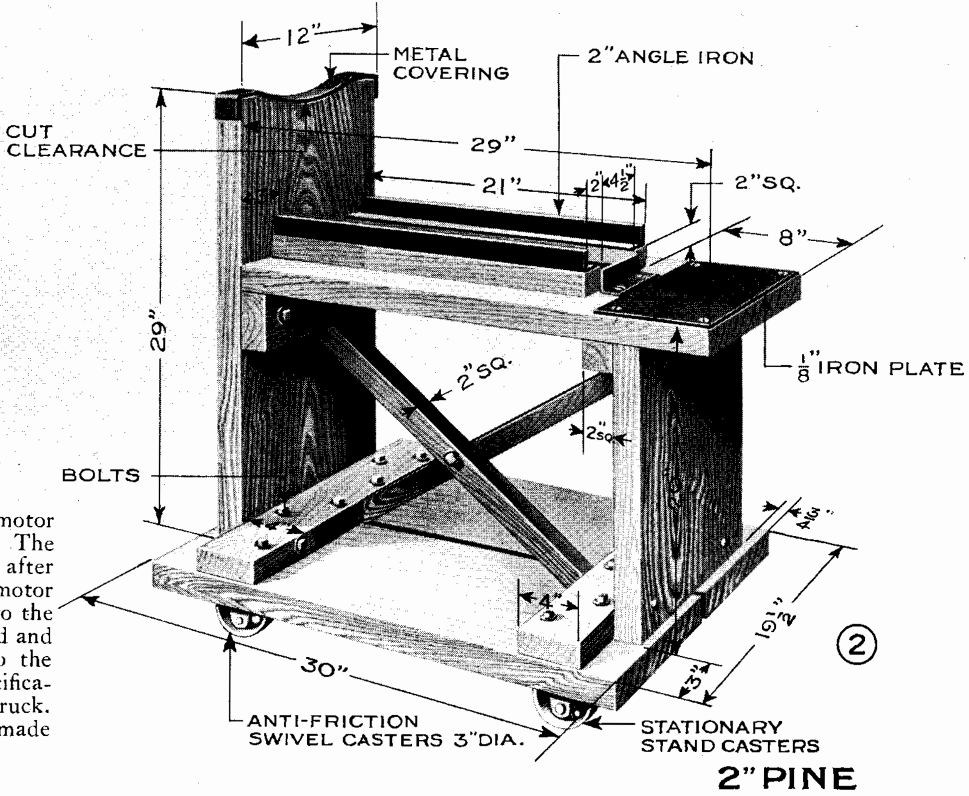

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Figure No. 1 shows the truck with motor in position for installing crank case. The truck is equipped with casters and after completing the repairs at the motor bench the truck may be rolled up to the end of the bench, the clamp loosened and the motor easily tipped over onto the truck. Figure No. 2 gives the specifications for constructing the motor truck. Ford agents will be able to have it made by local mechanics.

MOTOR TRUCK No. 1

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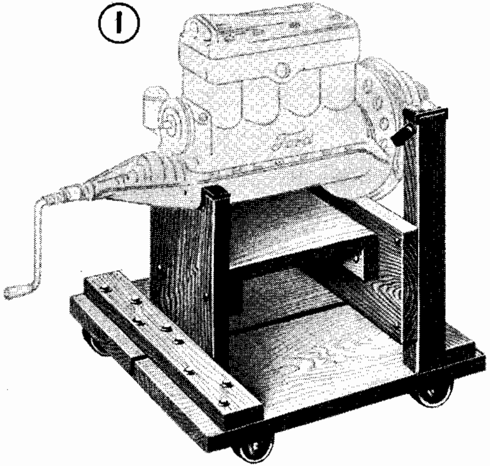

Figure No. 1 shows truck with motor in position for installing transmission cover, carburetor, water connections and in fact any parts necessary to complete the assembly. In order to remove the motor from the truck shown on preceding page to this truck, one workman should insert an iron bar in the end of the driving plate sleeve, another workman taking hold of the front end of the crank case. The motor can then be easily transferred. Figure No. 2 shows in detail the method of constructing this truck. Ford agents will find the trucks and bench efficient aids in their motor repair work.

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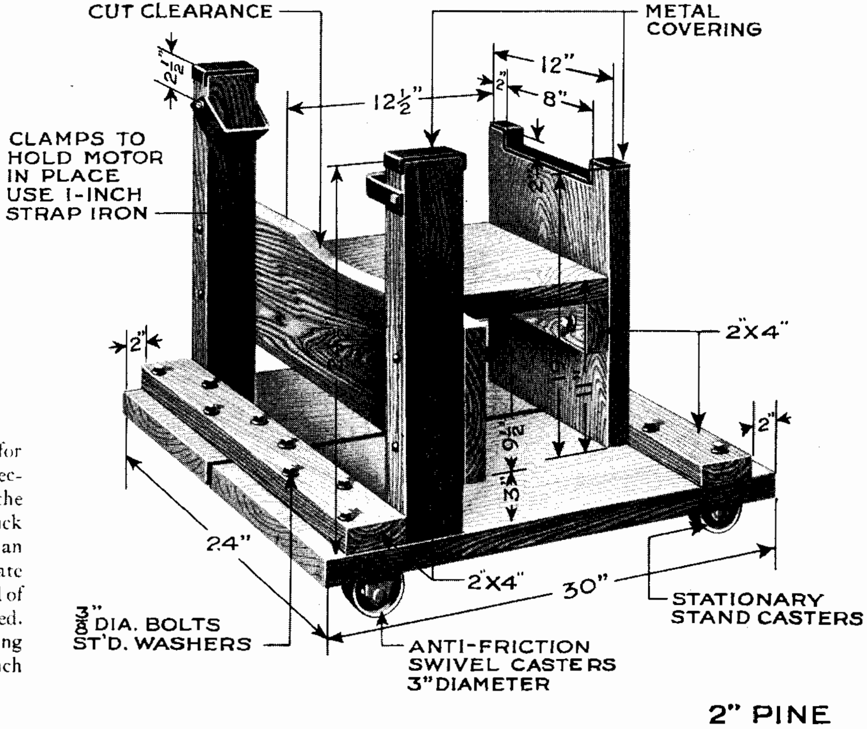

CUT CLEARANCE
METAL COVERING
12"
2"
8"
12½"
2½"
CLAMPS TO HOLD MOTOR IN PLACE USE 1-INCH STRAP IRON
2"X4"
2"
2"
24"
2"X4"
30"
3/8" DIA. BOLTS ST'D. WASHERS
ANTI-FRICTION SWIVEL CASTERS 3" DIAMETER
STATIONARY STAND CASTERS
2" PINE

MOTOR TRUCK No. 2

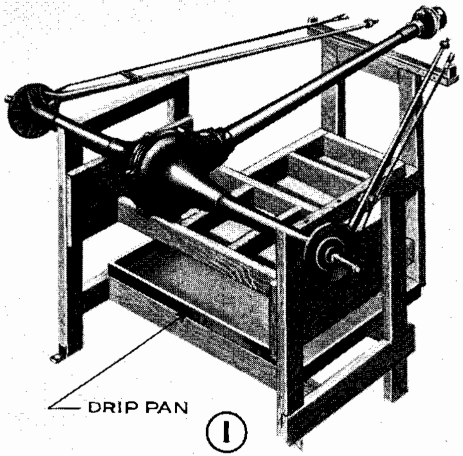
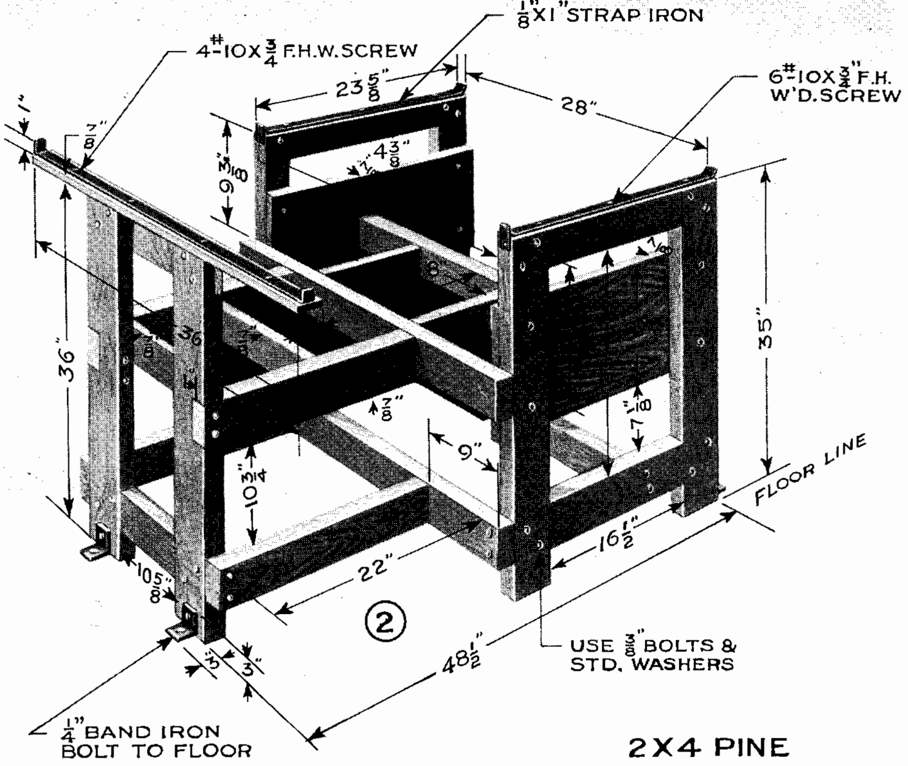
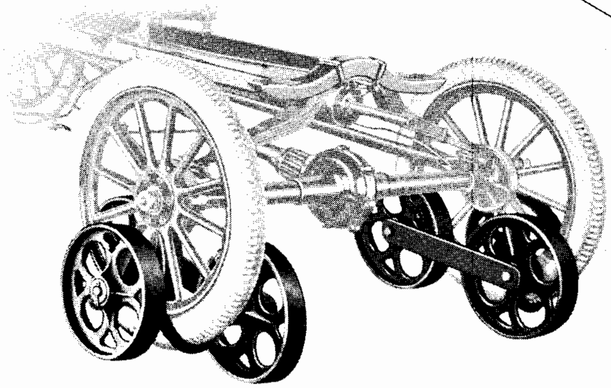


Figure No. 1 shows a rear axle assembly placed on the bench for overhauling. Every part of the assembly is accessible to the workman. Bolts, nuts, gears, etc. may be dropped in the boxes while working on the assembly. The tools required on the job may also be placed in the boxes. A drip pan, made of sheet iron to catch the oil and grease when taking down the assembly is shown in position. The rear axle bench should be part of the equipment of every Ford repair shop. Agents will be able to have the bench constructed by local mechanics from the specifications in Figure No. 2.

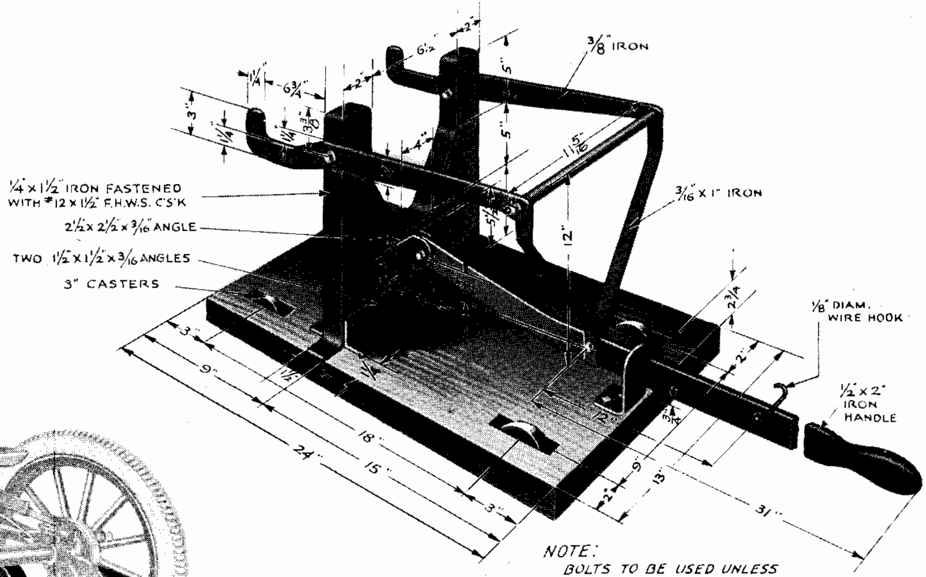


REAR AXLE BENCH

The Rear wheel trucks shown below will be found useful in moving cars about the floor.



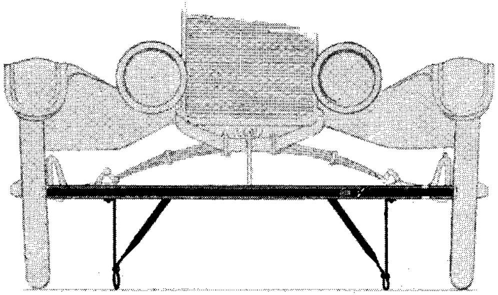
3Z—95 REAR WHEEL TRUCKS



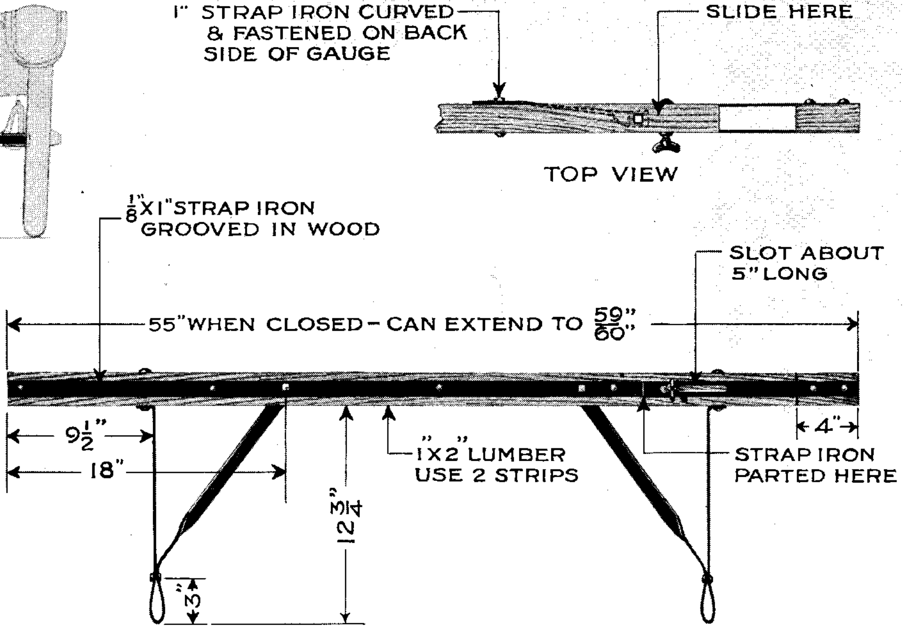
NOTE:
BOLTS TO BE USED UNLESS OTHERWISE SPECIFIED.

The above photograph shows the Front and Rear Axle Jack in detail with specifications so that Ford Agents can have it constructed by local mechanics. Agents will find this jack an efficient help in service work.

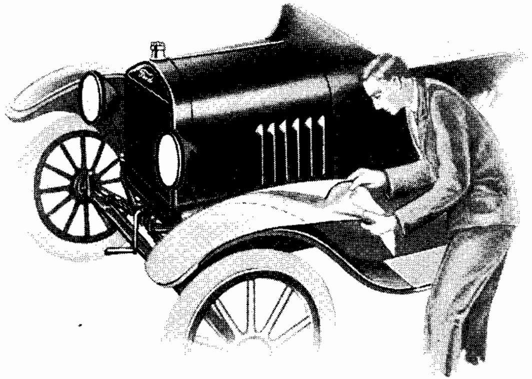
FRONT AND REAR AXLE JACK



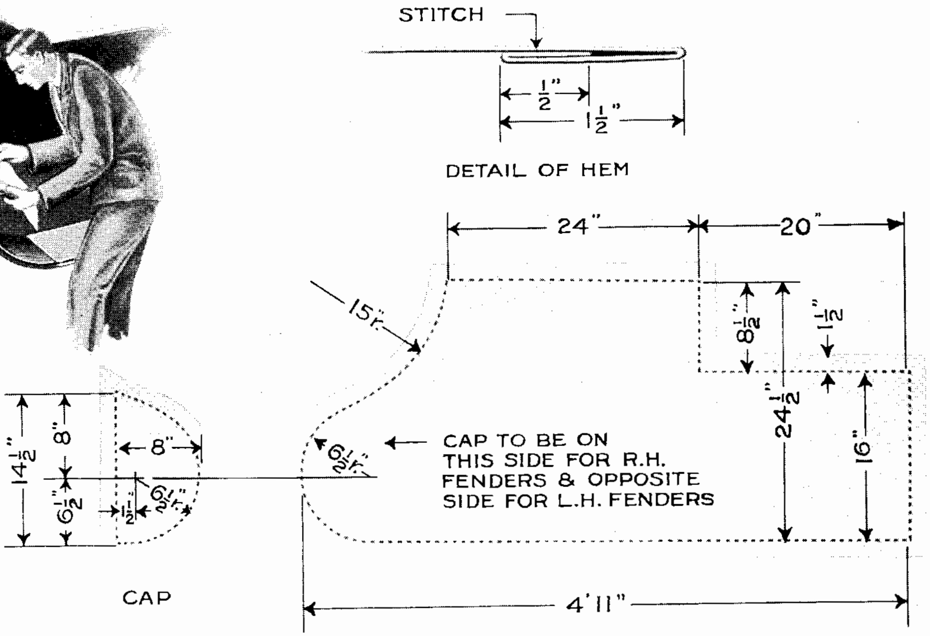
The above photograph shows the front wheel gauge in position for lining up the wheels. The gauge should be set at right angles to the floor and the cross bar adjusted so that either end will touch the felloe of the wheel. Then, without disturbing the adjustment, lift out the gauge, placing it back of the axle in the same perpendicular position. If the cross bar does not fit in between the felloes as it did in front the wheels are out of line. To bring the wheels back in line, turn the yoke on the spindle connecting rod until the proper adjustment is obtained. In some cases it may be necessary to replace the spindle arm. As an element of service to their customers Ford agents should make a practice of lining up the front wheels on all cars that go into their shop for repairs. Misalingnment of wheels will result in excessive wear on tires, and a few minutes spent in this way will aid in reducing tire expense. The gauge can be easily constructed from the specifications shown in the photograph.


1" STRAP IRON CURVED & FASTENED ON BACK SIDE OF GAUGE
SLIDE HERE
TOP VIEW
$\frac{1}{8}$"X1" STRAP IRON GROOVED IN WOOD
SLOT ABOUT 5" LONG
55" WHEN CLOSED - CAN EXTEND TO $\frac{59"}{60"}$
9$\frac{1}{2}$"
18"
12$\frac{3}{4}$"
3"
1"X2" LUMBER USE 2 STRIPS
4"
STRAP IRON PARTED HERE

FRONT WHEEL GAUGE



The above photograph shows the workman putting on the front fender cover before starting repairs on the motor. The cover extends down over the fender to the hood board and running board and protects the finish from dirt and grease while working on the engine. Also the workman can lay his tools down on the fender without danger of marring it. The fender covers can be easily made and Ford agents will find them helpful in their repair work.



NOTE-DOTTED LINES SHOW SIZE
OF COVER WHEN SEWED
ALLOW $1\frac{1}{2}$" FOR HEM

10-OZ. DUCK

FRONT FENDER COVER

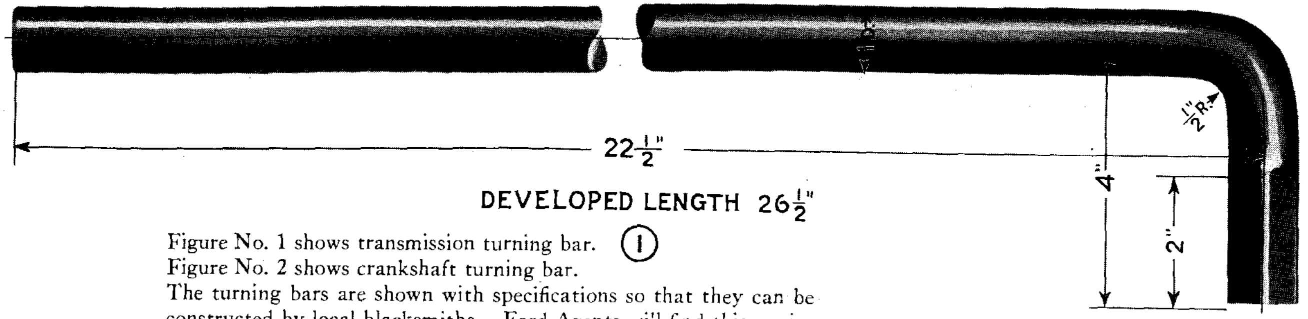
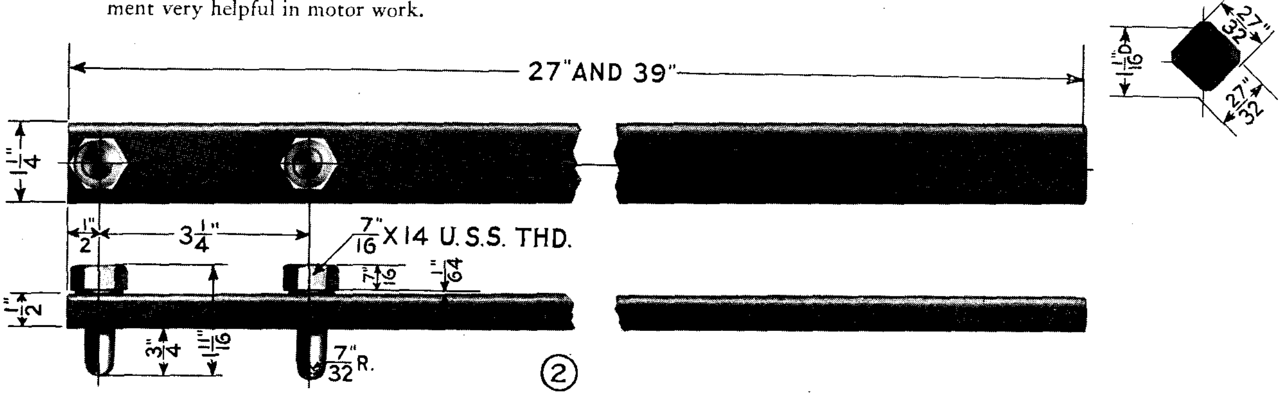
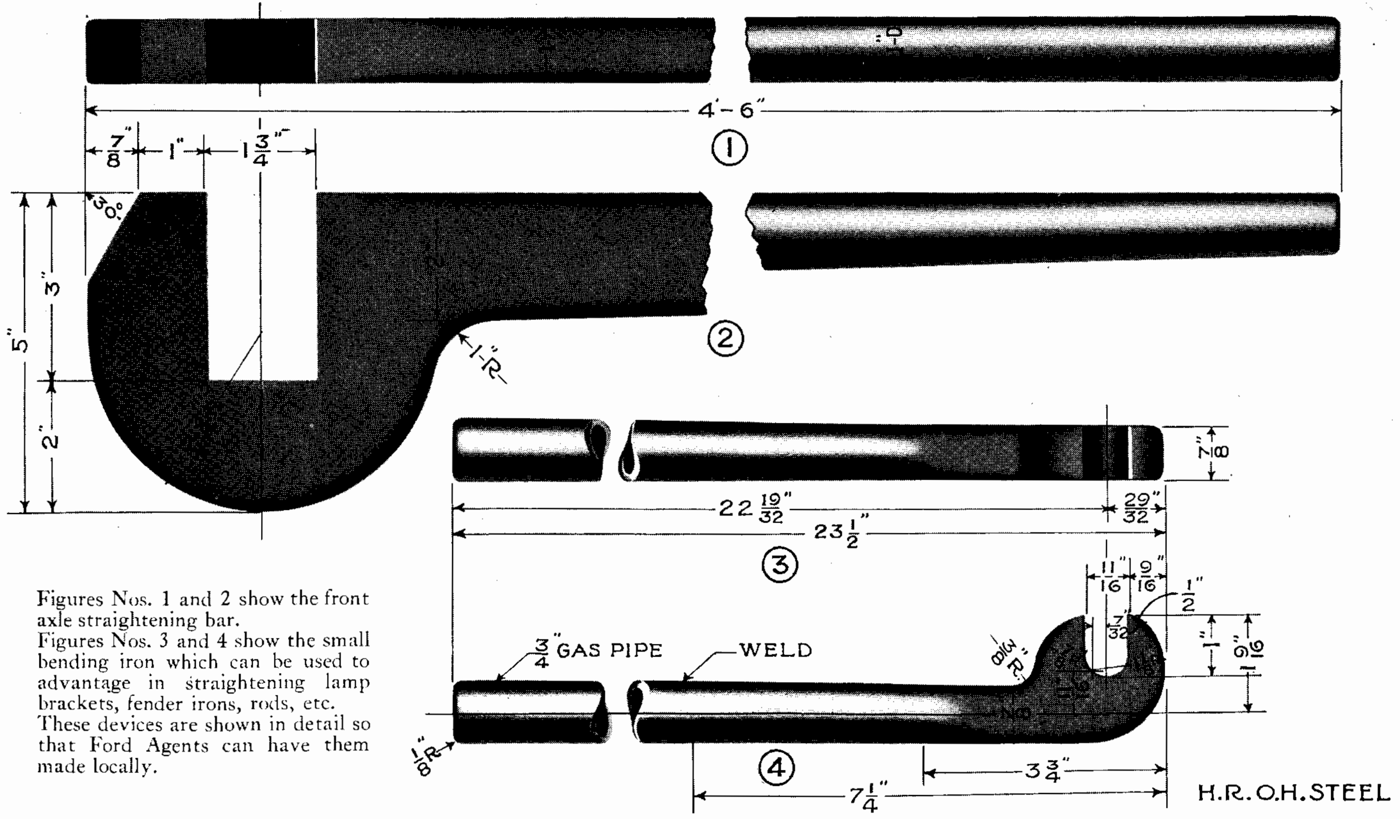


Figure No. 1 shows transmission turning bar.
Figure No. 2 shows crankshaft turning bar.
The turning bars are shown with specifications so that they can be constructed by local blacksmiths. Ford Agents will find this equipment very helpful in motor work.



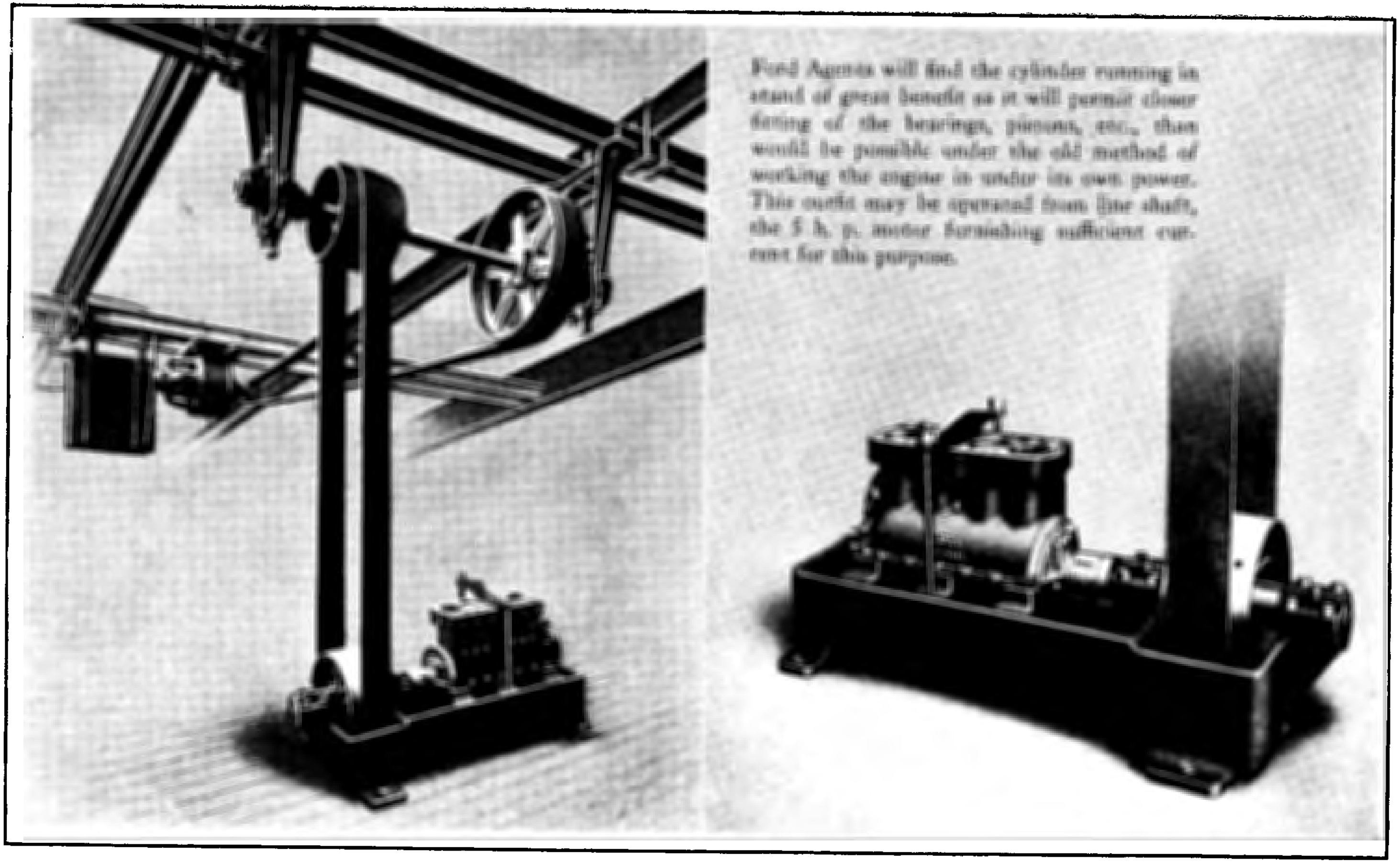
H.R.O.H. STEEL

TURNING BARS



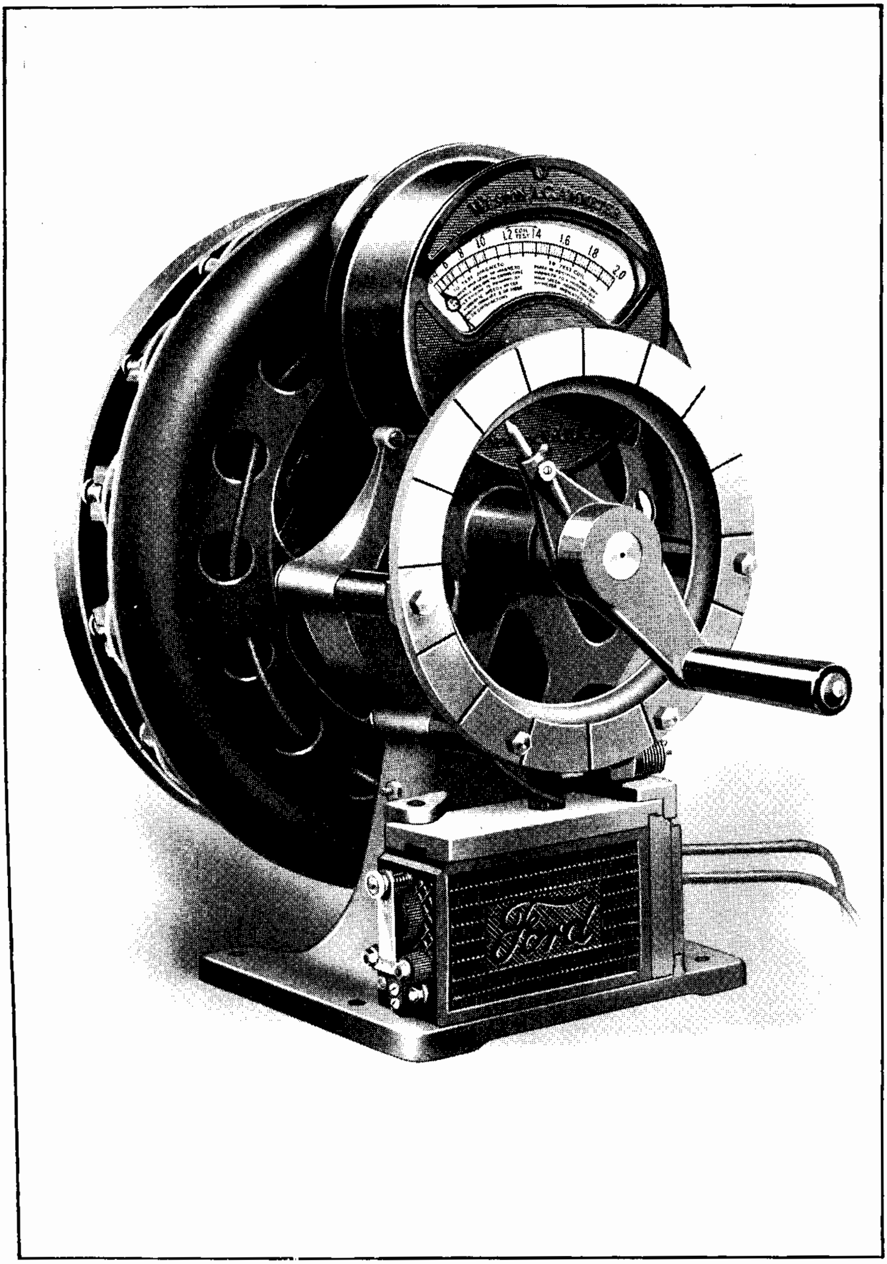
Figures Nos. 1 and 2 show the front axle straightening bar.
Figures Nos. 3 and 4 show the small bending iron which can be used to advantage in straightening lamp brackets, fender irons, rods, etc. These devices are shown in detail so that Ford Agents can have them made locally.

BENDING IRONS



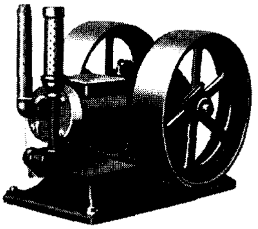
Ford Agents will find the cylinder running in stand of great benefit as it will permit closer fitting of the bearings, pinions, etc., than would be possible under the old method of working the engine in under its own power. This outfit may be operated from line shaft, the 5 h. p. motor furnishing sufficient current for this purpose.

CYLINDER RUNNING IN STAND



COIL UNIT AND MAGNETO TEST STAND

Agents will find the coil unit and magneto test stand an efficient aid in their service work as it will enable them to detect any ignition trouble on the Ford Car



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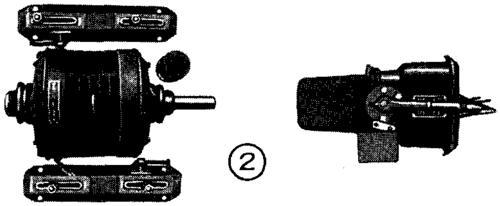

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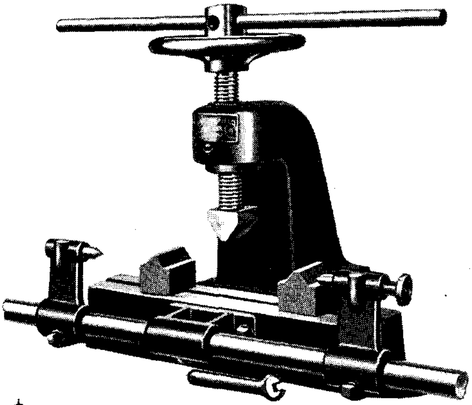

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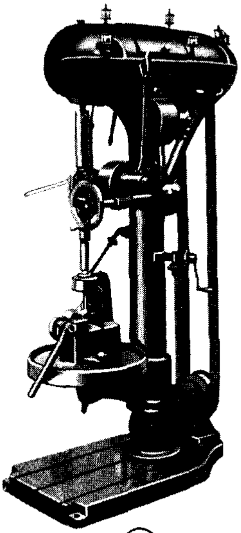

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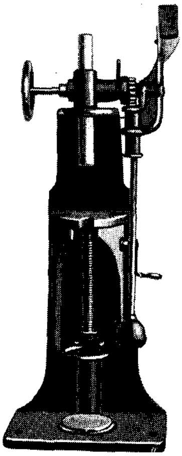

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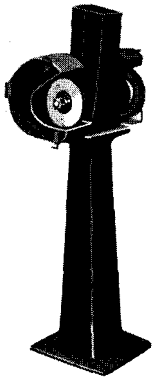

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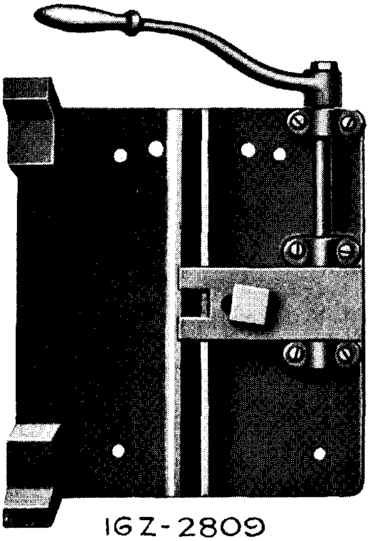
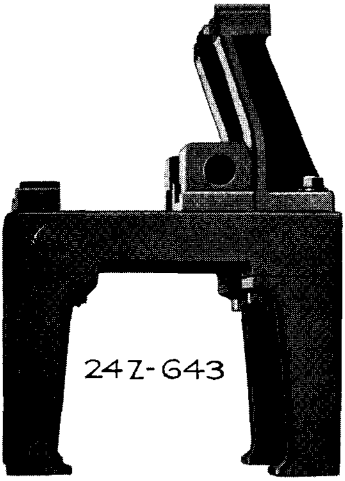
1 Air compressor
2 5 H.P. motor with starter. For line shaft
3 Straightening press
4 Drill press
5 Arbor press
6 Grinding and buffing stand

The above machinery, essential for the Ford Agent, may be purchased locally.

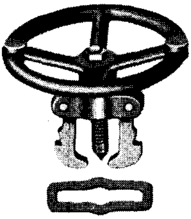
MACHINERY



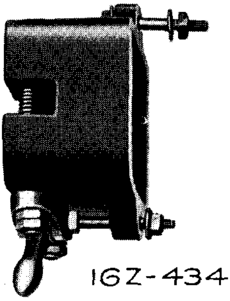
16Z-2809



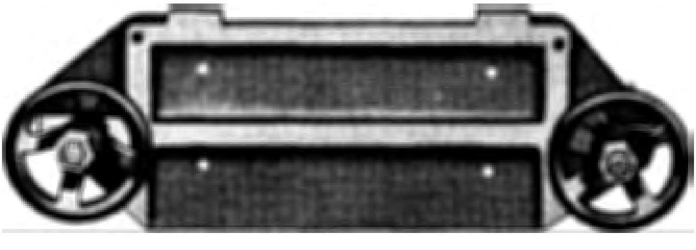
24Z-643



16Z-2040



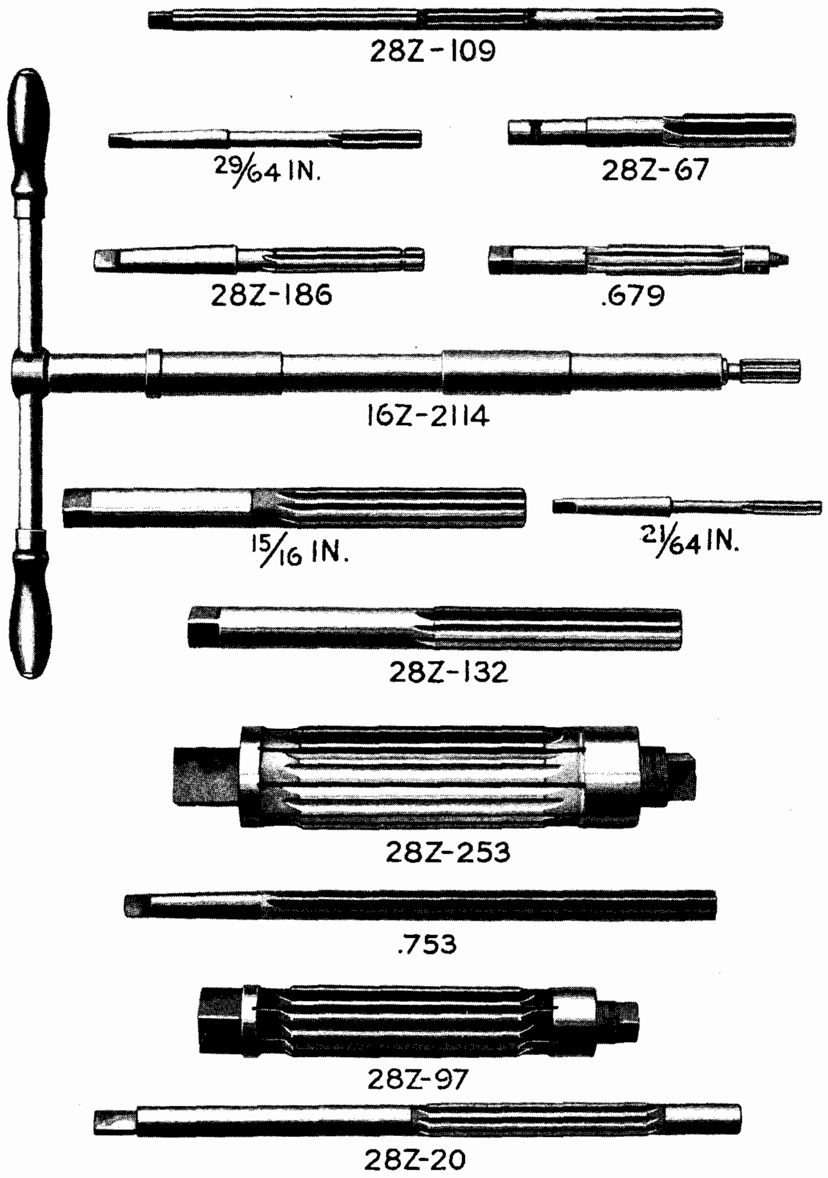
16Z-4349



16Z-2053

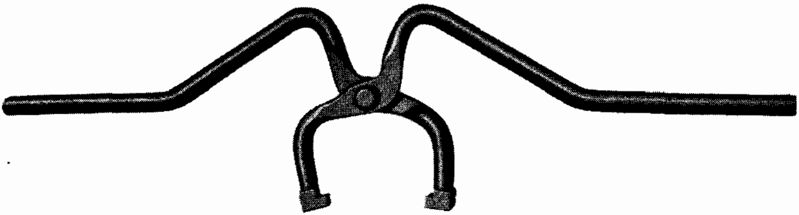
16Z-2809	Fixture for holding cylinder on work bench while fitting pistons, installing valves, push rods, camshaft, time gears, etc., also assembling transmission to block.
24Z-643	Gauge for testing alignment of finished connecting rods.
16Z-4349	Fixture for holding piston while assembling connecting rods.
16Z-2053	Cylinder clamp plate for holding cylinder block while scraping bearings.
16Z-2040	Steering wheel puller.

JIGS AND FIXTURES

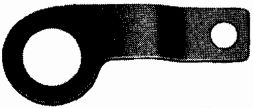


28Z-109	Spindle bushing reamer.
29/64″	Reamer for 1/64″ O. S. push rod.
28Z-67	Camshaft bearing bushing reamer —Detail No. 1.
28Z-186	Spindle arm and spring perch bushing reamer.
.679	Planet gear bushing reamer (triple gear).
16Z-2114	Line reamer for camshaft bearing.
15/16″	Transmission driving plate bushing reamer.
21/64″	Reamer for 1/64″ O. S. valve stem.
28Z-132	Driven gear sleeve bushing reamer.
28Z-253	Reverse gear bushing reamer.
.753	Steering bracket bushing reamer; also used for reaming starting crank sleeve.
28Z-97	Slow speed gear bushing reamer.
28Z-20	Piston bushing reamer.

REAMERS



3Z—628—Motor Tongs—The motor tongs can be used to advantage in lifting the motor about the shop or removing it from the car. In using the tongs, place the clamps under the flange of the crank case just in front of universal ball cap. The motor can then be easily lifted by a workman at each arm of the tongs and a third workman lifting by the crank handle or front end of crank case. When using the tongs to remove motor from car it is necessary to slide the motor forward.

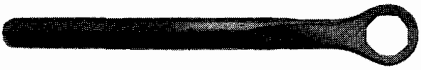


24Z—1192—Gauge for Setting Commutator—When setting the commutator the spark lever should be fully retarded. Place the larger hole in the gauge over head of commutator spring bolt, and, with the gauge in a horizontal position, bend the commutator pull rod until it hooks into the small hole.

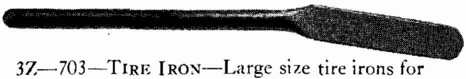
3Z—744—Pedal Bending Iron—The pedal bending iron is used in aligning or spacing the foot pedals.

3Z—631—Spark Rod Bending Iron—The spark rod bending iron is very useful in repair work when it is necessary to slightly bend either the commutator or carburetor pull rod to secure a proper adjustment.

3Z—657—Body Lifting Hook—The body lifting hooks are used in pairs for the purpose of lifting the rear end of the body to or from the chassis by inserting the hooks through the bolt holes in the body brackets. The hooks enable the workmen to remove or replace the body without interference from the rear wheels.



3Z—701—Hub Cap Wrench—Extra large hub cap wrench. A useful article in repair work.



3Z—703—Tire Iron—Large size tire irons for use in service work.

SPECIAL TOOLS